

WHAT IS CLAIMED IS:

1. An image processing device for performing a conversion processing of image data, comprising:

input means for inputting image data;

5 enlargement/reduction magnification setting means for setting an enlargement/reduction magnification of the image data inputted by said input means;

data converting means having a plurality of image data conversion tables and using one selected
10 conversion table to convert said inputted image data to output data; and

table selecting means for selecting said conversion table in accordance with the enlargement/reduction magnification set by said
15 enlargement/reduction magnification setting means.

2. An image processing device according to Claim 1, wherein said table selecting means selects the conversion table in which a change amount of output
20 image data is enlarged with respect to the change amount of input image data when the enlargement magnification is set to a predetermined value or more.

3. An image processing device according to Claim 1, wherein said table selecting means selects the conversion table in which a change amount of output
25 image data is reduced with respect to the change amount

of input image data when the reduction magnification is set to a predetermined value or less.

4. An image processing device according to Claim 5 1, further comprising judging means for judging from the inputted image data whether or not image includes a multiplicity of data of an intermediate density portion, wherein

when the enlargement magnification is set to a 10 predetermined value or more and said judging means judges that the multiplicity of data of the intermediate density portion are not included, said table selecting means selects the conversion table in which a change amount of output image data is enlarged 15 with respect to the change amount of input image data.

5. An image processing device according to Claim 20 1, further comprising judging means for judging from the inputted image data whether or not image includes a multiplicity of data of an intermediate density portion, wherein

when the reduction magnification is set to a predetermined value or less and said judging means judges that the multiplicity of data of the 25 intermediate density portion are included, said table selecting means selects the conversion table in which a change amount of output image data is reduced with

respect to the change amount of input image data.

6. An image processing device according to Claim
1, further comprising mode selecting means for
5 selecting either a character mode or a photograph mode
as a data conversion mode in said data converting
means, wherein

when the enlargement magnification is set to a
predetermined value or more and said mode selecting
10 means selects the character mode, said table selecting
means selects the conversion table in which a change
amount of output image data is enlarged with respect to
the change amount of input image data.

15 7. An image processing device according to Claim
1, further comprising mode selecting means for
selecting either a character mode or a photograph mode
as a data conversion mode in said data converting
means, wherein

20 when the reduction magnification is set to a
predetermined value or less and said mode selecting
means selects the photograph mode, said table selecting
means selects the conversion table in which a change
amount of output image data is reduced with respect to
25 the change amount of input image data.

8. An image processing device according to Claim

1, further comprising luminance/density converting means for converting luminance data to density data, wherein

5 said input means inputs the luminance data, and
said luminance/density converting means converts the luminance data to the density data and outputs the density data, and

 said data converting means uses the selected table to input the density data from said luminance/density
10 converting means, and converts the density data to output density data.

9. An image processing device according to Claim 1, wherein said input means inputs luminance data, and
15 said data converting means uses the selected table to convert the inputted luminance data to density data.

10. An image processing device for performing a conversion processing of image data, comprising:
20 input means for inputting image data;
 enlargement/reduction magnification setting means for setting an enlargement/reduction magnification of the image data inputted by said input means;
 table calculating means for calculating a
25 conversion table for converting input image data to output image data; and
 data converting means using the conversion table

calculated by said calculating means to convert said inputted image data to output data, wherein

5 said table calculating means calculates said conversion table in accordance with the enlargement/reduction magnification set by said enlargement/reduction magnification setting means.

11. An image processing device according to Claim 10, wherein said calculating means obtains the conversion table by applying primary conversion to prestored conversion table values.

12. An image processing device according to Claim 11, wherein when the enlargement magnification is set to a predetermined value or more, said table calculating means applies the primary conversion to obtain the conversion table in which a change amount of the output image data is enlarged with respect to the change amount of the input image data.

20

13. An image processing device according to Claim 11, wherein when the reduction magnification is set to a predetermined value or less, said table calculating means applies the primary conversion to obtain the conversion table in which a change amount of the output image data is reduced with respect to the change amount of the input image data.

25

14. An image processing device according to Claim 11, further comprising judging means for judging from the inputted image data whether or not image includes a multiplicity of data of an intermediate density portion, wherein

5 when the enlargement magnification is set to a predetermined value or more and said judging means judges that the multiplicity of data of the intermediate density portion are not included, said
10 table calculating means applies the primary conversion to obtain the conversion table in which a change amount of the output image data is enlarged with respect to the change amount of the input image data.

15 15. An image processing device according to Claim 11, further comprising judging means for judging from the inputted image data whether or not image includes a multiplicity of data of an intermediate density portion, wherein

20 when the reduction magnification is set to a predetermined value or less and said judging means judges that the multiplicity of data of the intermediate density portion are included, said table
25 calculating means applies the primary conversion to obtain the conversion table in which a change amount of the output image data is reduced with respect to the change amount of the input image data.

16. An image processing device according to Claim
11, further comprising mode selecting means for
selecting either a character mode or a photograph mode
as a data conversion mode in said data converting
5 means, wherein

when the enlargement magnification is set to a
predetermined value or more and said mode selecting
means selects the character mode, said table
calculating means applies the primary conversion to
10 obtain the conversion table in which a change amount of
the output image data is enlarged with respect to the
change amount of the input image data.

17. An image processing device according to Claim
15 11, further comprising mode selecting means for
selecting either a character mode or a photograph mode
as a data conversion mode in said data converting
means, wherein

when the reduction magnification is set to a
20 predetermined value or less and said mode selecting
means selects the photograph mode, said table
calculating means applies the primary conversion to
obtain the conversion table in which a change amount of
the output image data is reduced with respect to the
25 change amount of the input image data.

18. An image processing device according to Claim

10, further comprising luminance/density converting means for converting luminance data to density data, wherein

5 said input means inputs the luminance data, and
said luminance/density converting means converts the luminance data to the density data and outputs the density data, and

10 said data converting means uses the table calculated by the table calculating means to input the density data from said luminance/density converting means, and converts the density data to output density data.

15 19. An image processing device according to Claim 10, wherein said input means inputs luminance data, and said data converting means uses the table calculated by the table calculating means to convert the inputted luminance data to density data.

20 20. An image processing method for performing a conversion processing of image data, comprising:

an input process of inputting image data;

an enlargement/reduction magnification setting process of setting an enlargement/reduction magnification of the image data inputted by said input process;

a data converting process having a plurality of

image data conversion tables and using one selected conversion table to convert said inputted image data to output data; and

5 a table selecting process of selecting said conversion table in accordance with the enlargement/reduction magnification set by said enlargement/reduction magnification setting process.

21. An image processing method, comprising:
10 an input process of inputting image data;
an enlargement/reduction magnification setting process of setting an enlargement/reduction magnification of the image data inputted by said input process;

15 a table calculating process for calculating a conversion table for converting input image data to output image data; and

a data converting process for using the conversion table calculated by said calculating process to convert
20 said inputted image data to output data, wherein

said table calculating process comprises calculating said conversion table in accordance with the enlargement/reduction magnification set by said enlargement/reduction magnification setting process.